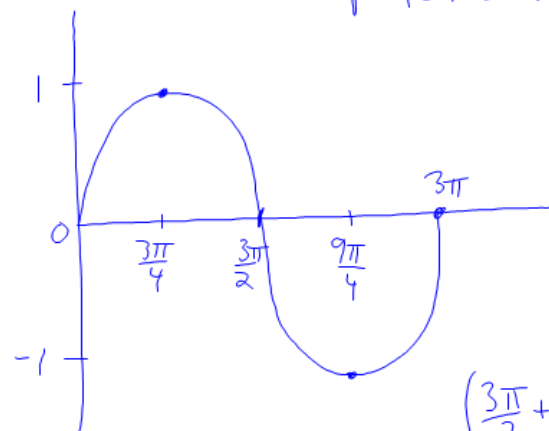


$$y = \sin \frac{2}{3}x$$

✓



$P = \text{Period} = 1 \text{ cycle}$

$$P = \frac{2\pi}{b}$$

$$P = \frac{2\pi}{\frac{2}{3}}$$

$$P = \frac{2\pi}{1} \cdot \frac{3}{2} = 3\pi$$

$$\frac{3\pi}{2} \cdot \frac{1}{2} = \frac{3\pi}{4}$$

$$\left(\frac{3\pi}{2} + \frac{3\pi}{1}\right) \cdot \frac{1}{2}$$

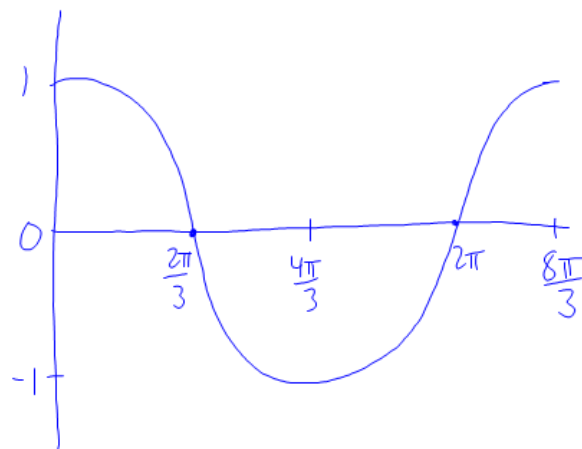
$$\frac{3\pi}{2} + \frac{6\pi}{2} = \frac{9\pi}{2} \cdot \frac{1}{2} = \frac{9\pi}{4}$$

$$y = \cos \frac{3}{4}x$$

$$P = \frac{2\pi}{b}$$

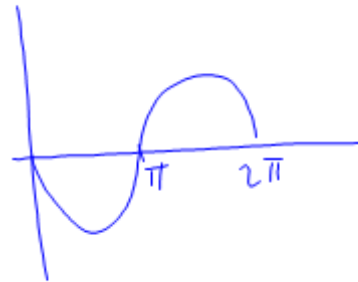
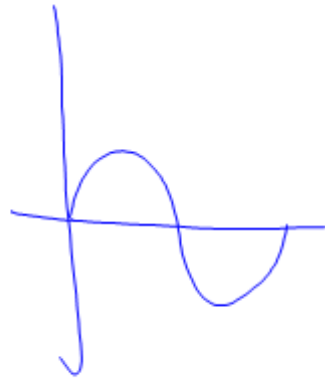
$$P = \frac{2\pi}{\frac{3}{4}}$$

$$P = \frac{2\pi}{1} \cdot \frac{4}{3} = \frac{8\pi}{3}$$

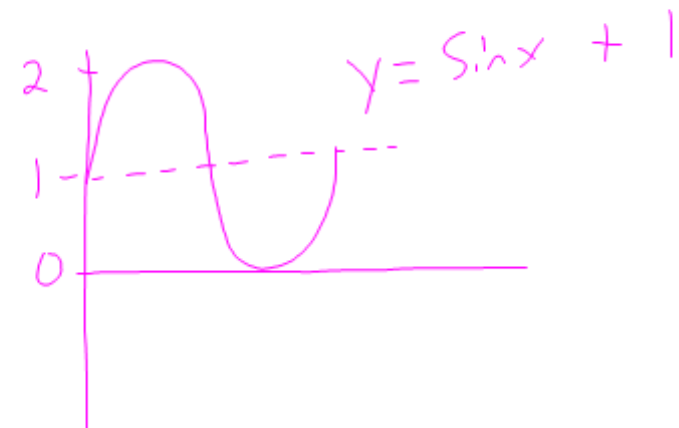
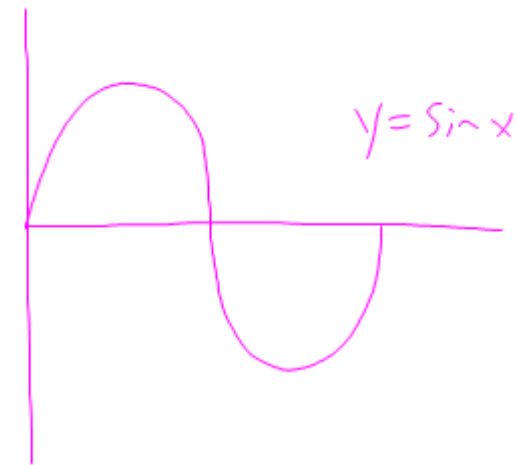
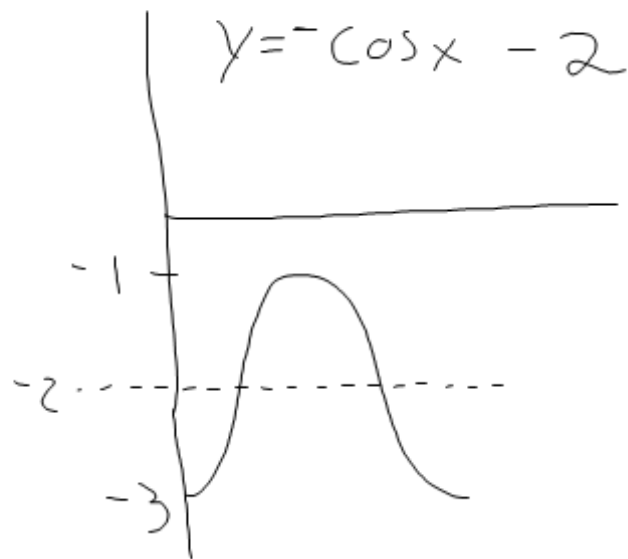


Do 4, 1 # 5-8, 15, 16, 23-33 odd $\approx \frac{1}{2}$ hr.

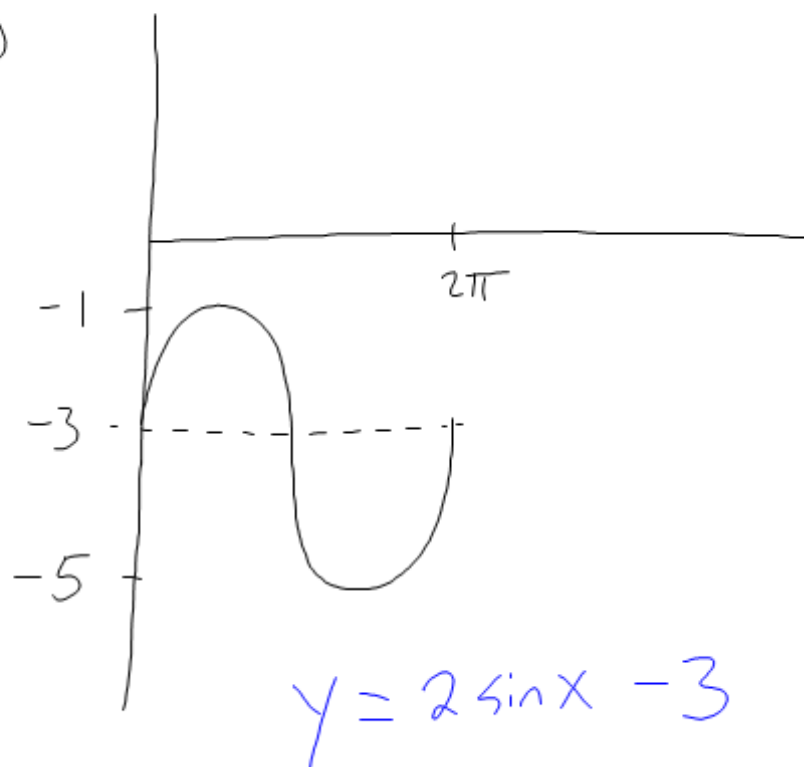
Do on HW



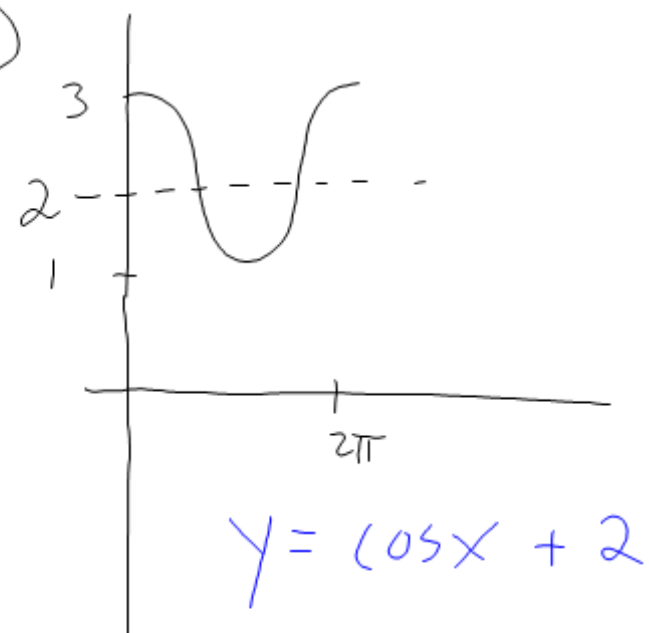
$a \sin bx + d$ ← vertical shift
 ↑
 amplitude
 middle to
 max or min
 always positive
 $b = \frac{2\pi}{p}$
 $p = \frac{2\pi}{b}$
 frequency
 # of cycles in
 2π



①



②



- Turn in 4.1

- 4.2 \rightarrow Read

- Do 4.2 #5-8, 35-42

5 x-coord, 3 y-coord for every graph